

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Office Action dated June 9, 2006 has been received and its contents carefully reviewed.

By this Response, claims 1 and 8 have been amended, and claims 7 and 12 have been cancelled. No new matter has been added. Claims 1-6, 8-11 and 13-15 are pending in the application. Reconsideration and withdrawal of the rejections in view of the above amendments and the following remarks are respectfully requested.

In the Office Action, claims 1-13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2002/0163615, issued to Fujioka et al. (hereafter “Fujioka”) in view of U.S. Publication No. 2002/0131003, issued to Matsumoto et al. (hereafter “Matsumoto”) and U.S. Patent No. 5,737,051, issued to Kondo et al. (hereafter “Kondo”). Applicant respectfully traverses the rejection because neither Fujioka, Matsumoto nor Kondo, analyzed alone or in any combination, teaches or suggests the combined features recited in the claims of the present application. In particular, Fujioka, Matsumoto and Kondo fail to teach an in-plane switching mode liquid crystal display device that includes, among other features, “a single metallic black matrix formed in the sealant region that extends into the array region of the first substrate” and “a common electrode and a pixel electrode on the second substrate in the array region”, as recited in independent claim 1 of the present application.

Fujioka, Matsumoto and Kondo further fail to teach a method for fabricating an in-plane switching mode liquid crystal display device that includes, “forming a single metallic black matrix in the sealant region that extends into the array region of the first substrate” and “forming a pixel electrode and a common electrode on the second substrate in the array region”, as recited in independent claim 8 of the present application.

The Office Action concedes that Fujioka does not disclose “an organic layer on the color filter in the array region, the organic layer covering at least a portion of the black matrix to shield an electric field in the array region, wherein the organic layer is formed in the array region and the sealant region and is in direct contact with the metallic black matrix and the sealant”

(see, Office Action, page 2, second paragraph, line 13 - page 3, line 2). To remedy the deficient teachings of Fujioka, the Office Action relies upon Matusmoto and Kondo. Applicant respectfully submits that Matusmoto and Kondo fail to remedy the deficient teachings of Fujioka such that any combination of Fujioka, Matusmoto and Kondo would provide an in-plane switching mode liquid crystal display device and method for fabricating having the combined features recited in the claims of the present application.

Applicant notes the Office Action relied upon FIG. 14 of Fujioka to teach “a common electrode and a pixel electrode in the pixel region”, as was recited in cancelled claims 7 and 12. Applicant submits FIG. 14 does indeed depict “the pixel electrode 12 is opposite to a counter electrode 18” (paragraph [0135], lines 16-17). However, FIG. 15 illustrates “the whole plane structure of a liquid crystal display device having such a circuit” of FIG. 14. Regarding FIG. 15, Fujioka discloses “the liquid crystal display device comprises a pair of substrates which are oppositely disposed. On one substrate 22 (an active matrix substrate), ... a display pixel 10, and the like are formed, while on the other substrate 24 (counter substrate), a counter electrode 18 (and the like) are formed” (paragraph [0135], lines 32-38). As such, Fujioka fails to teach “a common electrode and a pixel electrode on the second substrate in the array region”, as recited in independent claim 1, and “forming a pixel electrode and a common electrode on the second substrate in the array region”, as recited in independent claim 8 of the present application.

Further, neither Matusmoto nor Kondo disclose “a single black matrix formed in the sealant region that extends into the array region of the first substrate”, as recited in independent claim 1, and “forming a single metallic black matrix in the sealant region that extends into the array region of the first substrate”, as recited in independent claim 8 of the present application.

Because Fujioka, Matusmoto and Kondo fail to teach at least the above features of independent claims 1 and 8, claim 1 and its dependent claims 2-6, and claim 8 and its dependent claims 9-11 and 12-13 are allowable over any combination of Fujioka, Matusmoto and Kondo. Reconsideration and withdrawal of the rejection are respectfully requested.

In the Office Action, claims 14 and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fujioka and Kondo in view of U.S. Patent No. 6,894,753, issued to Song et al. (hereafter “Song”). Applicant respectfully traverses the rejection because neither Fujioka,

Kondo nor Song, analyzed alone or in any combination, teaches or suggests the combined features recited in the claims of the present application. In particular, Fujioka, Kondo and Song fail to teach “forming a single metallic black matrix in the sealant region that extends into the array region of the substrate” and “forming a pixel electrode and a common electrode on the second substrate in the array region”, as recited in independent claim 8 of the present application, from which claims 14 and 15 depend. Accordingly, one of ordinary skill in the art would not be motivated by the teachings of Kondo and Song to modify the teachings of Fujioka to provide a method of fabricating an in-plane switching mode liquid crystal display device having the combined features recited in independent claim 8 and its dependent claims 14 and 15. As such, independent claim 8 and dependent claims 14 and 15 are allowable over any combination of Fujioka, Mondo and Song. Reconsideration and withdrawal of the rejection are respectfully requested.

Applicant further traverses the rejections because Fujioka is directed to a Twisted Nematic (TN) mode LCD; while Matsumoto is directed to an In-Plane Switching (IPS) mode LCD. As such, Applicant submits one of ordinary skill in the art would not be motivated to combine the teachings of the different structure for the TN mode in Fujioka and the IPS mode in Matsumoto. Thus, any combination of Fujioka and Matsumoto to reject the claims of the present application is improper.

Applicant believes the foregoing amendments and remarks place the application in condition for allowance and early, favorable action is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

Application No.: 10/644,034
Amendment dated: September 8, 2006
Reply to Office Action dated June 9, 2006

Docket No.: 8734.223.00-US

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

Dated: September 8, 2006

Respectfully submitted,

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